AMENDMENTS TO THE SPECIFICATION

A replacement abstract showing the changes made is appended hereto as a separate page. No new matter has been added.

Please amend the paragraph beginning at page 4, line 18, through page 5, line 2, as follows:

FIG. 2 shows a block diagram of a conventional edge detector detecting the edge of the color image using a luminance component. Referring to FIG. 2, the sensed image sensed by an image sensor 201 is stored in a memory 202 as a Bayer pattern. Since 3 or more data components are required to realize the color image, pixel values of three independent color (R, G, and B) components [[)]] can be used as the data components. The image sensor 201 sensing the color image requires a color filter array (CFA) in which color sensors are arranged. In each color sensor of the image sensor 201, the pixel value of one of the color components is extracted with respect to each pixel, other color components of the pixel, which is not extracted with respect to the pixel, can be calculated through the CFA using information of adjacent pixels of the pixel. This method is a generally known Bayer pattern method corresponding to a CFA method. Restoring the color image through the image sensor 201 having the CFA is called interpolation and ~~demos icing~~ demosaicing.

Amend the paragraph beginning at page 8, lines 8-13, as follows:

A new method of simultaneously ~~perform~~ performing the edge enhancement and the interpolation without any additional function block needs to be easily employed in the digital camera or the widely known popular digital camera regardless of the size or the cost of the image processing IC.

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Amend the paragraph beginning at page 11, lines 1-9, as follows:

According to an aspect of the present invention, edge enhancement method and apparatus includes a method of detecting an edge from a brightness component (luminance component) of image data and enhancing the edge as a simplest method among various edge detection methods and enhancement methods. Since most edges [[shows]] show the same edge as the luminance component, the edge is detected and enhanced using the luminance component.

Amend the paragraph beginning at page 12, lines 4-13, as follows:

Since the edge enhancement method and apparatus perform the interpolation and the edge enhancement in a simplest structure in a small-sized image device which can be connected to a mobile device, such as a wireless phone according to an aspect ~~to another aspect~~ of the present invention, the method of detecting and enhancing the edge using the G component which mostly affect the luminance component, is employed in the edge enhancement method and apparatus.

Please replace formula 2 at page 13, line 17, with the following amended formula:

Edge detection value ~~(X)=4Gc-(G1+G2+G3+G4)~~ (X)=4G3-(G1+G2+G4+G5)

Amend the paragraph beginning at page 16, lines 22-24, as follows:

[[The]] When the pixel value of the center pixel of the 3x3 window is not the G value, the edge detection value X is not transmitted to the first adder 408.

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Amend the paragraph beginning at page 17, line 28, through page 18, line 7, as follows:

As described above, when the edge does not exist in a portion of the image data corresponding to the [[3x4]] 3x3 window stored in the register 402, the edge detection value X corresponding to the addition value of 4Gc-(G1+G2+G3+G4) becomes near zero, that is, the edge detection value (X)=0, since [[all]] most pixel values of the pixels disposed in the 3x3 window are similar to each other. To the contrary, when the edge exists in the portion of the image data corresponding to the [[3x4]] 3x3 window stored in the register 402, an absolute value of the edge detection value X corresponding to the addition value of 4Gc-(G1+G2+G3+G4) becomes a greater value, that is, the edge detection value (X) varies, since some of the pixel values of the pixels disposed around the center pixel of the 3x3 window are different from each other according the luminance component.

Amend the paragraphs beginning at page 20, lines 18-33, as follows:

The reference value CV outputted from the control unit 505 may be adjusted according to a level of the edge enhancement. If the reference value CV is set to a low value, a dimmed portion of the 3x3 window, that is, a portion having a very small change of an object of the image data, can be enhanced to make a blurred boundary of the object enhanced. If the reference is set to a high value, ~~Another~~ another portion of the 3x3 window in which the image data is changed, the boundary of the object is enhanced to be vivid. A necessity of the edge enhancement varies according to kinds or usages of the image data, and the reference CV is adjusted according to the necessity of the edge enhancement.